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Amendments to the Claims

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims:

Claims 1 - 33 (Canceled)

Claims 34 - 36 (Canceled)

37. (Previously Presented) A motion picture retrieval information generating apparatus (40) that generates retrieval information for retrieving motion picture data constituted of one or more scenes (140, 142, 144, 146, 160), comprising:

a retrieval information generating section (102, 103, 104, 105) that generates retrieval information corresponding to each of said one or more scenes on the basis of said motion picture data, and

wherein said retrieval information generating section (102, 103, 104, 105) comprises:

a first summary information generating means (103) for forming plural spatially split blocks having a length of each of said scenes in a direction of the time axis obtained by spatially splitting said each of said scenes (140, 142, 144, 146, 160) to generate summary information (188) of a spatially split block unit, and

wherein said first summary information generating means (103) splits each of said scenes (140, 142, 144, 146, 160) into 2 to the nth power parts, n being a predetermined number.

38. (Previously Presented) The motion picture retrieval information generating apparatus according to claim 37, wherein said retrieval information generating section (102, 103, 104, 105) further comprises:

a second summary information generating means (102) for temporally dividing each of said scenes (140, 142, 144, 146, 160) to form plural temporally divided blocks having a picture size of said each of said scenes spatially and to generate summary information of a temporally divided block unit.

39. (Previously Presented) The motion picture retrieval information generating apparatus according to claim 38, wherein said retrieval information generating section (102, 103, 104, 105) further comprises:

a third summary information generating means (104) for generating summary information of all of each of said scenes (140, 142, 144, 146, 160).

40. (Canceled)

41. (Currently Amended) ~~The motion picture retrieval information generating apparatus according to claim 40, wherein said retrieval information generating section (102, 103, 104, 105)~~ further comprises: A motion picture retrieval information generating apparatus (40) that

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generates retrieval information for retrieving motion picture data constituted of one or more

scenes (140, 142, 144, 146, 160), comprising:

_____ a retrieval information generating section (102, 103, 104, 105) that generates retrieval

information corresponding to each of said one or more scenes on the basis of said motion picture

data, and

_____ wherein said retrieval information generating section (102, 103, 104, 105) comprises:

_____ a first summary information generating means (103) for forming plural spatially

split blocks of a scene which are obtained by spatially splitting said scene and which

have a length of said scene in a direction of the time axis and for generating summary

information (188) of said scene generated by calculating statistics of motion picture data

within each of said spatially split blocks of said scene, wherein said first summary

information generating means (103) spatially splits each of said scenes (140, 142, 144,

146, 160) into a predetermined number of parts in each of two directions defined

spatially,

_____ a second summary information generating means (102) for temporally dividing

each of said scenes (140, 142, 144, 146, 160) to form plural temporally divided blocks

having a picture size of said each of said scenes spatially and to generate summary

information of a temporally divided block unit, and

a third summary information generating means (104) for generating summary

information of all of each of said scenes (140, 142, 144, 146, 160).

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42. (Canceled)

43. (Canceled)

44. (Previously Presented) The motion picture retrieval information generating apparatus (40) according to claim 37, wherein said retrieval information generating section (102, 103, 104, 105) further comprises:

a third summary information generating means (104) for generating summary information of all of each of said scenes (140, 142, 144, 146, 160).

45. (Canceled)

46. (Currently Amended) ~~The motion picture retrieval information generating apparatus (40) according to claim 34, wherein said retrieval information generating section (102, 103, 104, 105) further comprises:~~ A motion picture retrieval information generating apparatus (40) that generates retrieval information for retrieving motion picture data constituted of one or more scenes (140, 142, 144, 146, 160), comprising:

a retrieval information generating section (102, 103, 104, 105) that generates retrieval information corresponding to each of said one or more scenes on the basis of said motion picture data, and

_____ wherein said retrieval information generating section (102, 103, 104, 105) comprises:

_____ a first summary information generating means (103) for forming plural spatially split blocks of a scene which are obtained by spatially splitting said scene and which have a length of said scene in a direction of the time axis and for generating summary information (188) of said scene generated by calculating statistics of motion picture data within each of said spatially split blocks of said scene, and

a third summary information generating means (104) for generating summary information of all of each of said scenes (140, 142, 144, 146, 160).

47. (Canceled)

48. (Canceled)

49. (Currently Amended) The motion picture retrieving apparatus (50) according to claim 48, wherein: A motion picture retrieving apparatus (50) for retrieving a desired picture using retrieval information corresponding to each of one or more scenes (140, 142, 144, 146, 160) constituting motion picture data, in which said motion picture data is related with said retrieval information and said retrieval information comprises summary information (188) for each of said one or more scenes, said retrieval information further comprising summary information with plural temporally divided blocks having a picture size of each of said scenes spatially, obtained by temporally dividing said each of said scenes (140, 142, 144, 146, 160), as

a unit, and summary information with each of said scenes (140, 142, 144, 146, 160) as a unit,

said motion picture retrieving apparatus comprising:

        information managing means (501, 502) for reading and managing said retrieval

information;

        first scene retrieving means (504), being connected with said information managing

means, and for retrieving a scene (140, 142, 144, 146, 160) meeting a first retrieval request in

response to said first retrieval request with a scene (140, 142, 144, 146, 160) as a retrieval unit,

provided from the outside, using said summary information included in said retrieval

information;

        wherein said summary information is statistics of motion picture data within spatially

split blocks of said one or more scenes, the spatially split blocks of a scene are obtained by

spatially splitting said scene and have a length of said scene in a direction of the time axis;

        second scene retrieving means (505), being connected to said information managing

means (501, 502), for retrieving a scene (140, 142, 144, 146, 160) meeting a second retrieval

request in response to said second retrieval request with a scene (140, 142, 144, 146, 160) as a

retrieval unit, provided from the outside, using said summary information of a temporally divided

block unit included in said retrieval information; and

        said retrieval information further comprises summary information with each of said

scenes (140, 142, 144, 146, 160) as a unit, and

        said motion picture retrieving apparatus further comprises:

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third scene retrieving means (503), being connected with said information managing

means (501, 502), and for retrieving a scene (140, 142, 144, 146, 160) meeting a third retrieval

request in response to said third retrieval request with a scene (140, 142, 144, 146, 160) as a

retrieval unit, provided from the outside, using said summary information with a scene (140,

142, 144, 146, 160) as a unit included in said retrieval information.

Claims 50 - 55 (Canceled)

56. (Currently Amended) ~~The motion picture retrieval information managing apparatus~~

~~according to claim 55, wherein:~~ A motion picture retrieval information managing apparatus for

managing retrieval information corresponding to each of one or more scenes (140, 142, 144,

146, 160), constituting motion picture data, wherein said motion picture data is related with said

retrieval information, and said retrieval information comprises summary information (188) for

each of said one or more scenes, comprising:

_____ a read-out section (501) that reads out said retrieval information;

_____ a retrieval information managing section (502) that holds retrieval information read out

by said read-out section (501) and outputs said summary information included in said retrieval

information in response to a first retrieval request with a scene (140, 142, 144, 146, 160) as a

retrieval unit, provided from the outside;

wherein said summary information is statistics of motion picture data within spatially split blocks of said one or more scenes, the spatially split blocks of a scene are obtained by spatially splitting said scene and have a length of said scene in a direction of the time axis;

wherein said retrieval information further comprises summary information with plural temporally divided blocks having a picture size of each of said scenes spatially, obtained by temporally dividing said each of said scenes (140, 142, 144, 146, 160), as a unit, and said retrieval information managing section (502) further outputs said summary information of a temporally divided block unit included in said retrieval information in response to a second retrieval request with a scene (140, 142, 144, 146, 160) as a retrieval unit, provided from the outside; and

wherein said retrieval information further comprises summary information with each of said scenes (140, 142, 144, 146, 160) as a unit, and

wherein said retrieval information managing section (502) further outputs said summary information with a scene (140, 142, 144, 146, 160) as a unit included in said retrieval information in response to a third retrieval request with a scene (140, 142, 144, 146, 160) as a retrieval unit, provided from the outside.

57. (Canceled)

58. (Currently Amended) A motion picture retrieval information generating apparatus

(40) that generates retrieval information for retrieving motion picture data constituted of one or

more scenes (140, 142, 144, 146, 160), comprising:

a motion picture structure information outputting section (101) for analyzing the motion

picture data and outputting motion picture structure information expressing positions, in said

motion picture data, of each of said one or more scenes,

a retrieval information generating section (102, 103, 104, 105) that generates retrieval

information corresponding to each of said one or more scenes on the basis of said motion picture

data and said motion picture structure information outputted responsive to the motion picture

data and the outputted motion picture structure information, and

wherein said retrieval information generating section (102, 103, 104, 105) comprises:

a first summary information generating means (103), being responsive to the motion

picture data and the outputted motion picture structure information, for forming a plurality of

spatially split blocks, each of the plurality of spatially split blocks having a temporal length of

each of said scenes in a direction of the time axis, the plurality of spatially split blocks being

obtained by spatially splitting said each of said scenes (140, 142, 144, 146, 160) and for

generating summary information (188) for each of the plurality of spatially split blocks, and

_____wherein the summary information being generated by said first summary information

generating means (103) for each of the plurality of spatially split blocks comprises, frequency

information and average information.

59. (Previously Presented) The motion picture retrieval information generating

apparatus according to claim 58, wherein:

each of said scenes (140, 142, 144, 146, 160) are obtained by dividing consecutive

motion picture data on a time axis, and

wherein said retrieval information generating section (102, 103, 104, 105) generates

retrieval information corresponding to each of said scenes (140, 142, 144, 146, 160).

60. (Previously Presented) The motion picture retrieval information generating apparatus

according to claim 58, wherein said first summary information generating means (103) spatially

splits each of said scenes (140, 142, 144, 146, 160) into a predetermined number of parts in each

of two directions defined spatially and so that each of the predetermined number of parts has a

length along the direction of the time axis of each of said scenes.

61. (Canceled)
62. (Canceled)

63. (Currently Amended) The motion picture retrieval information generating apparatus

of any of claims 37 or 58, wherein: 34, 37 or 58, wherein:

each of said one or more scenes is composed of a plurality or more of frames,

each of said plurality of frames is spatially split in a fashion corresponding to the spatial

splitting of said each scene, and

the summary information for each spatially split block of said each scene represents the

information of at least a plurality of the corresponding spatial split blocks of the plurality of or

more frames making up said each scene.

64. (Currently Amended) The motion picture retrieval information generating apparatus

of any of claims 37 or 58, wherein: 34, 37 or 58, wherein:

each of said one or more scenes is composed of a plurality or more of frames,

each of said plurality of frames is spatially split in a fashion corresponding to the spatial

splitting of said each scene, and

the summary information for each spatially split block of said each scene represents the

information of all of the corresponding spatial split blocks of the plurality or more of frames

making up said each scene.

Claims 65 - 70 (Canceled)